
DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17****Endangered and Threatened Wildlife and Plants; Proposal To Determine *Glaucocarpum Suffrutescens* To Be an Endangered Species With Critical Habitat**

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Service proposes to determine a plant, *Glaucocarpum suffrutescens* (toad-flax cress), to be an endangered species and to designate its critical habitat under the authority of the Endangered Species Act of 1973, as amended. This species is the only one in its genus. It is endemic in the Uinta Basin of northeastern Utah on shale barrens of the Green River Formation, in or adjacent to the Hill Creek drainage in southern Uintah County, and at the base of the Badland Cliffs in nearby Duchesne County. The 8 known populations of the species total fewer than 1,900 individuals and show decline due to overgrazing and removal of building stone; future oil shale development without consideration for this species could cause its extinction. Lands on which the species occurs are under the jurisdiction of Bureau of Land Management, Department of Energy, Bureau of Indian Affairs, State of Utah, Uintah and Ouray Indian Reservation, and private individuals or companies. This proposal, if made final, would implement protection provided by the Endangered Species Act. The Service is requesting data and comments from interested parties on this proposal.

DATES: Comments from all interested parties must be received by November 4, 1985. Public hearing requests must be received by October 21, 1985.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Regional Director, U.S. Fish and Wildlife Service, P.O. Box 25486, Denver Federal Center, Denver, Colorado 80225. Comments and materials received will be available for public inspection, by appointment, during normal business

hours at the Service's Regional Endangered Species Division, fourth floor, 134 Union Boulevard, Lakewood, Colorado.

FOR FURTHER INFORMATION CONTACT: Dr. James L. Miller, Regional Botanist, Regional Endangered Species Staff, at either address above (303/236-7531 or FTS 776-7531).

SUPPLEMENTARY INFORMATION:

Background

This species was first discovered in 1935 and described by Reed C. Rollins as *Thelypodium suffrutescens* in Graham (1937). Following further research, Dr. Rollins (1938) described the monotypic genus *Glaucocarpum* for this species. The toad-flax cress is a member of the mustard family (Brassicaceae); it is a perennial herb from a deep woody root, and forms a clump of several slender simple stems, with elongated loose inflorescences and yellow flowers.

Glaucocarpum suffrutescens is one of several endemic limited to the Green River Formation in the Uinta Basin of eastern Utah. It survives with a few other species mostly on one calcareous shale startum strongly resistant to erosion. The habitat of this plant is disjunct knolls and benches resembling small extremely dry desert islands surrounded by sagebrush or piñon-juniper woodland. *Cryptantha barnebyi* (Barneby cat's-eye), another candidate plant under review for threatened or endangered status (48 FR 53640), occurs at least in part in the habitat of *Glaucocarpum*.

Glaucocarpum occurs in two main population groups near each other in Uintah County. One group is centered in the Gray Knolls between the Green River and Hill Creek, with 800-1000 plants in 3 populations. The other group is centered on Little Rock Pack Mountain between Hill Creek and Johnson Draw, with about 800 individuals in 4 populations. A small third population center about 24 kilometers (15 miles) to the west in Duchesne County has 28 plants. The individual populations range in size from 3 to perhaps 1,000 plants. Most populations occur on land managed by the Bureau of Land Management (BLM).

From 1977 to 1980, considerable field work was undertaken on this species by Larry England, Kathy Mutz, Elizabeth Neese, and Scott Peterson. This work documented range, specific occurrences, approximate number of individuals, and recommended areas of critical habitat for *Glaucocarpum* (England, 1982).

The toad-flax cress habitat is underlain by rich oil shale deposits.

Overgrazing and building stone collecting have damaged the species and decreased its range; oil shale development without adequate provision for the species could destroy it in the future.

Section 12 of the Endangered Species Act of 1973 (Act) directed the Secretary of the Smithsonian Institute to prepare a report on those plants considered to be endangered, threatened, or extinct. This report, designated as House Document No. 94-51, was presented to Congress on January 9, 1985. On July 1, 1985, the Service published a notice in the *Federal Register* (40 FR 27823) of its acceptance of the report as a petition to list the taxa named therein under section 4(c)(2) of the 1983 Act (petition acceptance is now governed by section 4(b)(3) of the Act), and of its intention thereby to review the status of those plants.

Glaucocarpum suffrutescens included in the July 1985, notice and was proposed by the Service for listing as endangered along with some 1,700 other vascular plant taxa on June 16, 1976 (41 FR 24523). General comments received in relation to the 1976 proposal are summarized in an April 26, 1978, *Federal Register* publication (43 FR 17909).

The Endangered Species Act Amendments of 1978 required that all proposals over 2 years old be withdrawn; proposals already over 2 years old were subject to a 1-year grace period. On December 10, 1979, the Service published a notice of withdrawal of that portion of the June, 1976, proposal that had not been made final, along with four other proposals that had expired (44 FR 70796). The July, 1975, notice was replaced on December 15, 1980, by the Service's publication in the *Federal Register* (45 FR 82480) of a new notice of review for plants, which included *Glaucocarpum suffrutescens* as a category-1 species. Category 1 comprises taxa for which the Service presently has sufficient biological informal to support their being proposed to be listed as endangered or threatened species.

The Endangered Species Act Amendments of 1982 required that all petitions pending as of October 13, 1982, be treated as having been newly submitted on that date. The deadline for a finding on such petitions, including that for *Glaucocarpum suffrutescens*, was October 13, 1983. On October 13, 1983, and again on October 12, 1984, the petition finding was made that listing this species was warranted but precluded by other listing actions, in accordance with section 4(b)(3)(B)(iii) of the Act. Notification of the 1983 finding was published on January 20, 1984 (49 FR 2485). Such a finding requires a recycling

of the petition, pursuant to section 4(b)(3)(C)(i) of the Act. Therefore a new finding must be made; this proposed rule constitutes the finding that the petitioned action is warranted, in accordance with section 4(b)(3)(B)(ii) of the Act.

Summary of Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (codified at 50 CFR Part 424, see revision at 49 FR 38900, October 1, 1984) set forth the procedures for adding species to the Federal lists. A species may be determined to be an endangered or a threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to *Glaucocarpum suffrutescens* (Rollins) Rollins (toad-flax cress) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* Over the almost 50 years since its original discovery, there has been decline in the habitat of this species. During repeated fieldwork at the type locality, most recently by Dr. Rollins in 1980, no individuals have been found (England, 1982; Rollins, Harvard University, pers. comm., 1983). Removal of building stone and heavy grazing are probable factors that have contributed to the extirpation of this population (England, 1982). Larger linear flagstones, are, or were, common in the habitat of the species; populations appear denser and more vigorous where these tuff fragments or clasts, which are in great demand, have not been removed.

The entire range of this monotypic genus is underlain by oil shale, which is likely to be mined when economic conditions favor it. The largest population is partly on Naval Oil Shale Reserve No. II of the Department of Energy, with BLM responsible for surface management, and partly on the Uintah and Ouray Indian Reservation, which is owned and managed by the Ute Indian tribe. The other 4 populations with 70 or more plants are partly managed by BLM and partly under private, State, or Indian management, while the 3 smallest populations are solely managed by one of the above entities. Habitat and individuals on two sections of land under State of Utah and private ownership are now under lease by an oil shale development firm. Without a concerted effort and coordinated planning, this monotypic genus could inadvertently be brought to extinction (England, 1982).

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* None known.

C. *Disease or predation.* The adverse effect of sheep and cattle on this species appears to be due both to grazing and trampling (England, 1982).

D. *The inadequacy of existing regulatory mechanisms.* There are no Federal, State, or local laws or regulations that address this species or directly provide for protection of its habitat.

Although BLM is aware of this plant, it is not currently obligated to regulate activities so as to provide for the conservation of *Glaucocarpum*. The Endangered Species Act offers possibilities for additional protection of this species through the provisions of section 7 of the Act (interagency cooperation) and through section 9 of the Act, which prohibits removing and reducing to possession a listed plant from an area under Federal jurisdiction.

E. *Other natural or manmade factors affecting its continued existence.* The estimated total number of individuals of toad-flax cress that currently exist is less than 1,900. Only 3 of the 8 populations consist of 170 individuals or more, and 3 consist of fewer than 30 plants each. Only the largest populations may have genetic variability sufficient for long-term adaptation.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to propose this rule. Based on this evaluation, the preferred action is to list *Glaucocarpum suffrutescens* as an endangered species. With fewer than 1,900 individuals known in 8 populations and the risk of damage to the cress and its habitat, endangered status seems an accurate assessment of the plant's condition. It is prudent to propose critical habitat, because risks from vandalism or collecting are not anticipated in the remote area where the species occurs, and delineating the habitat may aid in its management.

Critical Habitat

Critical habitat, as defined by section 3 of the Act, means—(i) the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection, and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such

areas are essential for the conservation of the species.

Section 4(a)(3) of the Act requires that critical habitat be designated to the maximum extent prudent and determinable concurrently with the determination that a species is endangered or threatened. Critical habitat of about 7,360 acres in the Uinta Basin is being proposed for *Glaucocarpum suffrutescens*. The area proposed supports the majority of known populations of the species and appears to be necessary to its continued survival. The species is confined to a localized geological formation in the area. Buff-colored calcareous shale of the Green River Formation, which directly occupies some 2,552.5 acres on scattered knolls and slopes, is a primary constituent element for the species. The 8 parcels of critical habitat are indicated exactly in the Regulations Promulgation section of this proposal. No critical habitat is proposed for the newly discovered small population in Duchesne County, because it has not yet been adequately delimited.

Section 4(b)(8) of the Act requires, for any proposed or final regulation that designates critical habitat, a brief description and evaluation of those activities (public or private) that may adversely modify such habitat or may be affected by such designation. A large range of surface-disturbing activities could adversely modify the *Glaucocarpum* habitat. The area involved is remote, about 2.5 hours on dirt roads from the nearest town, and it is believed that most human activities will probably be associated with energy development. These could include road building, exploration, drilling, surface mining, servicing or retort sites, oil transportation, and housing and recreation for workers. As in all deserts, available water is a critical factor in plant survival. The effect oil shale development would have on local water supplies for this species is not known. Building stone removal and livestock grazing can also have adverse effects on the critical habitat.

The Bureau of Land Management, the Department of Energy, the Bureau of Indian Affairs, the State of Utah, the Ute Indian tribe, and private individuals or companies have jurisdiction over various parts or aspects of the toad-flax cress habitat. As resident and transient human populations increase in the basin with growth of the energy industry, pressures on the toad-flax cress habitat may change and increase. In complying with section 7 of the Act, Federal agencies might find it necessary to increase regulation and enforcement on the removal of building stone from the

habitat and reduce grazing, or require site clearances prior to development or approval of leases. If there is no Federal presence in the activity on State, Indian, or private lands, critical habitat designation would have no effect.

Section 4(b)(2) of the Act requires the Service to consider economic and other impacts of designating a particular area as critical habitat. The Service will consider the critical habitat designation, in light of all additional relevant information obtained, at the time of final rule.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and can result in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States, and requires that recovery actions be carried out for all listed species. Such actions are initiated by the Service following listing. The protection required of Federal agencies and the prohibitions against taking are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened, and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR Part 402, and are now under revision (see proposal at 48 FR 29990; June 29, 1983). Section 7(a)(4) requires Federal agencies to confer informally with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service. Possible Federal involvement with *Glaucocarpum suffrutescens* has already been

discussed under "Critical Habitat," above. Management of some areas is likely to be affected, but not to any major extent.

The Act and its implementing regulations found at 50 CFR 17.61, 17.62, and 17.63 set forth a series of general trade prohibitions and exceptions that apply to all endangered plant species. With respect to *Glaucocarpum suffrutescens*, all trade prohibitions of section 9(a)(2) of the Act, implemented by 50 CFR 17.61, would apply. These prohibitions, in part, would make it illegal for any person subject to the jurisdiction of the United States to import, or export, transport in interstate or foreign commerce in the course of a commercial activity, or sell or offer for sale this species, in interstate or foreign commerce. Certain exceptions can apply to agents of the Service and State conservation agencies. The Act and 50 CFR 17.62 and 17.63 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered species under certain circumstances. No trade in *Glaucocarpum suffrutescens* is known. It is anticipated that few trade permits would ever be sought or issued, since this species is not common in the wild or in cultivation, and is of no commercial interest.

Section 9(a)(2)(B) of the Act, as amended in 1982, prohibits the removal and reduction to possession of endangered plant species from areas under Federal jurisdiction. The prohibition would apply to the toad-flax cress. Permits for exceptions to this prohibition are available through section 10(a) of the Act, until revised regulations are promulgated to incorporate the 1982 Amendments. Proposed regulations implementing this new prohibition were published on July 8, 1983 (48 FR 31417), and it is anticipated that these will be made following public comment. It is anticipated that few collecting permits for the toad-flax cress will ever be requested, as it is not of commercial interest. Requests for copies of the regulations on plants and inquiries regarding them may be addressed to the Federal Wildlife Permit Office, 6th floor Broyhill, U.S. Fish and Wildlife Service, Washington, D.C. 20240 (703/235-1903).

If this species is listed under the Act, the Service will review it to determine whether it should be placed upon the Annex of the Convention on Nature

Protection and Wildlife Preservation in the Western Hemisphere, which is implemented through section 8A(e) of the Act, and whether it should be considered for other appropriate international agreements.

Public Comments Solicited

The Service intends that any final rule adopted will be accurate and as effective as possible in the conservation of each endangered or threatened species. Therefore, any comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning any aspect of these proposed rules are hereby solicited. Comments particularly are sought concerning the following:

(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to *Glaucocarpum suffrutescens*;

(2) The location of any additional populations of *Glaucocarpum suffrutescens*; and the reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act;

(3) Additional information concerning the range and distribution of this species;

(4) Current or planned activities in the subject area and their possible impacts on *Glaucocarpum suffrutescens*; and

(5) Any foreseeable economic and other impacts resulting from the proposed designation of critical habitat. Final promulgation of the regulations on *Glaucocarpum suffrutescens* will take into consideration the comments and any additional information received by the Service, and such communications may lead to adoption of a final regulation that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be filed within 45 days of the date of the proposal. Such requests must be made in writing and addressed to the Regional Director, U.S. Fish and Wildlife Service (see ADDRESSES section).

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared

in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

Literature Cited

- England, J.L. 1982. Status report on *Glaucocarpum suffrutescens* (Rollins). Rollins. Office of Endangered Species, U.S. Fish and Wildlife Service, Region 8, Denver, Colorado. 39 pp.
- Graham, E.H. 1937. Botanical studies in the Uinta Basin of Utah and Colorado. Ann. Carnegie Mus. 26:1-432.
- Rollins, R.C. 1938. *Glaucocarpum* a new genus in the Cruciferae. Madsrovno 4:232-235.

Authors

The primary authors of this proposed rule are J. Scott Peterson, Colorado Natural Heritage Inventory, Denver, Colorado and J. Larry England, Field Office, U.S. Fish and Wildlife Service, Salt Lake City, Utah (801/524-4430 or FTS 588-4430). Dr. James L. Miller of the Service's Denver Office and Dr. Bruce MacBryde, then of the Office of Endangered Species, Washington, D.C., served as editors.

List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

Proposed Regulations Promulgation

PART 17—[AMENDED]

Accordingly, it is hereby proposed to amend Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, as set forth below:

1. The authority citation for Part 17 continues to read as follows:

Authority: Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 9-159, 93 Stat. 1225; Pub. L. 97-304, 96 Stat. 1411 [16 U.S.C. 1531 *et seq.*].

2. It is proposed to amend § 17.12(h) by adding the following, in alphabetical order under the family Brassicaceae, to the List of Endangered and Threatened Plants:

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
Brassicaceae—Mustard family						
Glaucocarpum suffrutescens	Toad-flax cress	U.S.A. (UT)	E	17.96(a)	NA	
.		

3. It is further proposed to amend § 17.96(a) by adding critical habitat of *Glaucocarpum suffrutescens*, as follows: (The position of this entry under § 17.96(a) follows the same sequence as the species occurs in 17.12.)

§ 17.96 Critical habitat—plants.

(a) * * *

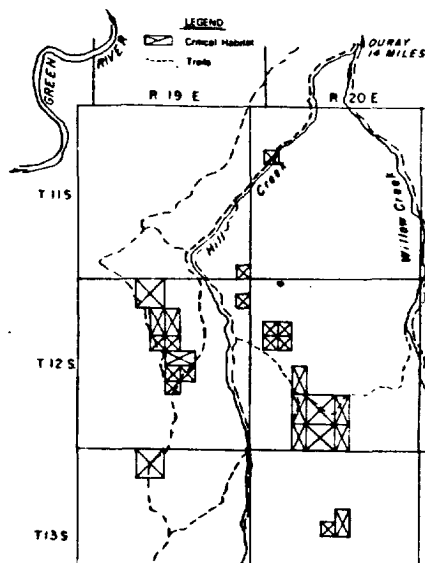
Family Brassicaceae: *Glaucocarpum suffrutescens* (toad-flax cress)

Utah, Uintah County, Hill Creek area south of Ouray: T11S R19E SE¼ Sec. 36; T11S R20E SE¼ Sec. 7; T12S R19E SE¼ Sec. 1, Sec. 4, E½ Sec. 9, W½ Sec. 10, NW¼ and S½ Sec. 15, NE¼ Sec. 18, N½ and SW¼ Sec. 22; T12S R20E SE¼ Sec. 7, SW¼ Sec. 8, NW¼ Sec. 17, NE¼ Sec. 18, E½ Sec. 20, W½ Sec. 27, Sec. 28, E½ Sec. 29, E½ Sec. 32, Sec. 33, W½ Sec. 34; T13S R19E Sec. 4; T13S R20E W½ Sec. 15, SE¼ Sec. 16.

The primary constituent element is buff-colored, calcareous shale found on knolls and slopes of the Green River Formation within the areas designated.

(critical habitat map follows)

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Dated: August 9, 1985.

P. Daniel Smith,

Acting Deputy Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 85-21161 Filed 9-4-85; 8:45 am]

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